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PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q63182

Hyun-Sook KANG, et al.

Appln. No.: 09/915,766

Group Art Unit: 2686

Confirmation No.: 7463

Examiner: Willie J. DANIEL, Jr.

Filed: July 27, 2001

For: METHOD FOR ALLOCATING BANDWIDTH IN A WIRELESS LOCAL AREA
NETWORK AND APPARATUS THEREOF

REPLY BRIEF PURSUANT TO 37 C.F.R. § 41.41

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.41, Appellant respectfully submits this Reply Brief in response to the Examiner's Answer dated September 8, 2005. Entry of this Reply Brief is respectfully requested if the Examiner does not re-open prosecution as requested in the enclosed Request To Reopen Prosecution Under 37 C.F.R. § 41.39(b)(1).

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REPLY BRIEF UNDER 37 C.F.R. § 41.41
U.S. Appln. No.: 09/915,766

ATTORNEY DOCKET NO. Q63182

STATUS OF CLAIMS

Claims 1-10 are pending in the application and are all finally rejected.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1, 5, 6, and 10 are anticipated under 35 U.S.C. § 102(e) by Bauchot (U.S. Patent No.: 5,970,062).
2. Whether claims 2, 4, 7, and 9 would have been obvious, within the meaning of 35 U.S.C. § 103(a), over Bauchot in view of Kalliokulju (U.S. Patent No.: 6,553,006).
3. Claims 3 and 8 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Bauchot in view of Kalliokulju and Montpetit (U.S. Patent No.: 6,366,761).

ARGUMENT

In the *Response to Arguments* section (7) of the Examiner's Answer, the Examiner responds to Appellants' arguments set forth in the Appeal Brief dated February 9, 2005. In response, Appellants maintain that the present invention, as claimed, is patentable over the applied references at least based on the previously submitted arguments and the arguments set forth below.

- A. Bauchot does not teach or suggest at least, "receiving a transmission rate corresponding to a desired contention free period of data to be transceived from said at least one wireless communication terminal," as recited in independent claim 1 and similarly recited in independent claim 6 and their dependents.

In the Appeal Brief dated February 9, 2005, Appellants argued that Bauchot does not disclose or suggest the limitation quoted in the sub heading above. In response, in the *Response to Arguments* section of the present Examiner's Answer, the Examiner alleges, in part:

Appellant admits on page 9, 1st paragraph, lines 5-6 "...bandwidth relates to transmission rate...". The Examiner maintains that Bauchot inherently discloses "receiving a transmission rate..." limitation, as evidenced by the fact that one of ordinary skill in the art would have recognized that ATM (asynchronous transfer mode) technology must have a transmission rate established in accordance to the ATM service traffic parameters such as quality of service (QOS) parameters, bit rate (e.g., ABR (available bit rate), CBR (constant bit rate), VBR (variable bit rate), UBR (unspecified bit rate), and MCR (minimum cell rate)), and traffic contract. ATM technology guarantees some level of service in accordance to the connection (i.e., bandwidth) which corresponds to a transmission rate (see Bauchot col. 1, lines 24-31; col. 2, lines 37 - col. 3, line 13; Table 1). Bauchot teaches of using an ATM based system in which mobile terminals (10) request utilization of an UP_RESERVED period (i.e., Contention Free Period) to transfer data (col. 6, lines 30-40; col. 8, lines 14-20; Fig. 1A), where the mobile terminals (10) request additional bandwidth to transfer

data. As a result of requesting the UP_RESERVED period, a transfer rate would be inherent because the UP_RESERVED period (i.e., bandwidth) would be allocated to the mobile terminal according to the type of traffic. The traffic parameters vary according to the needed QOS, bit rate, and traffic contract (see Bauchot col. 1, lines 24-31; col. 2, line 37 - col. 3, line 13; Table 1), where the type of traffic class of service such as rt-VBR (real time Variable Bit rate) and nrt-VBR (non real time Variable Bit rate) are traffic parameters that correlate to a transmission rate (see col. 6, lines 41-49; col. 7, lines 1-4).

In response, Appellants submit, contrary to the Examiner's assertion, that the mobile terminals 10 do NOT request additional bandwidth to transfer data. Upon reading Bauchot, one skilled in the art would understand Bauchot as only teaching that the mobile terminals make reservation requests, however there is no disclosure or suggestion at the above cited portions of Bauchot that the mobile terminals request additional bandwidth. Therefore, since the Examiner's assertion that the mobile terminals of Bauchot request additional bandwidth is not supportable, Appellants maintain that Bauchot does not teach or suggest at least receiving a transmission rate corresponding to a desired contention free period of data to be transceived from said at least one wireless communication terminal.

Further, the Examiner cites a new reference, Fichou et al. (US Patent No. 5,909,443), "to further support the inherency of the transmission rate." The Examiner does not expressly indicate that Fichou is being applied to support a new ground of rejection in the *Grounds of Rejection* section (12), however Appellants believe that the Examiner has applied Fichou to support an implicit new ground of rejection. *See paragraph bridging pages 4 and 5 of*

*Examiner's Answer.*¹ In addition to citing new a new reference, Fichou, the Examiner alleges, on page 5 of the Examiner's Answer, "When a mobile terminal requests the reservation of additional bandwidth, the request must have a transmission rate that the bandwidth must support according to the quality of service (QOS) traffic parameters... ." In response, Appellants submit that the Examiner's conclusion that the above-quoted limitation is satisfied is based on an erroneous premise. That is, Appellants maintain, as argued above, that the mobile terminal in Bauchot does not request the reservation of additional bandwidth. Therefore, the basis for the Examiner's conclusion is not supportable.

At least based on the foregoing and the arguments previously submitted, Appellants maintain that Bauchot does not disclose or suggest the above-quoted features of claim 1. Appellants maintain that independent claim 6 is patentable for reasons similar to those set forth with respect to claim 1.

Dependent claims 5 and 10 are patentable at least by virtue of their respective dependency from independent claims 1 and 6

B. Claims 2, 4, 7, and 9 would not have been obvious, within the meaning of §103(a), over Bauchot and Kalliokulju.

In the Appeal Brief dated February 9, 2005, Appellants argued that one skilled in the art would not have been led to combine Bauchot with Kalliokulju, to arrive at the present invention. *See pages 10-11 of Appeal Brief.* In response, the Examiner alleges:

¹ 37 C.F.R. § 41.39(a)(2) allows an Examiner to include a new ground of rejection in the Examiner's Answer.

In addition to being in the same field of endeavor, both applied references share the common features such as a bandwidth or resource allocation (see Bauchot - col. 6, lines 47-49; Kalliokulju - abstract; col. 4, lines 1-3) and quality of service (QOS) (see Bauchot col. 6, lines 43-50; Kalliokulju - abstract; col. 4, lines 44-54).

Therefore, the reason to combine the teachings of Bauchot with Kalliokulju is obvious because the invention of Kalliokulju is not restricted to the system of Kalliokulju and can also be applied to other message transmissions systems (see Kalliokulju- col. 4, lines 29-35) to reliably ensure a certain quality of service (QOS) level (see Kalliokulju - col. 4, lines 13-14)..

In response, even though the cited portions of Kalliokulju generally disclose that the invention described therein can also be applied to other message transmission systems, the specific invention of Kalliokulju is directed to a general packet radio service (GPRS) system, and nowhere does Kalliokulju indicate a relationship with an asynchronous transfer mode (ATM) system. ATM was developed to resolve the conflict between circuit switched networks and packet switched networks, therefore it does not necessarily follow that the invention of Kalliokulju, which specifically relates to a packet switched data transmission, would be applied to an invention involving ATM.

Therefore, at least based on the foregoing, Appellants maintain that claims 2, 4, 7, and 9 are patentably distinguishable over the applied references. Further, Appellants maintain that claims 2, 4, 7, and 9 are patentable at least by virtue of their respective dependencies from independent claims 1 and 6. Kalliokulju does not make up for the deficiencies of Bauchot.

C. Claims 3 and 8 would not have been obvious, within the meaning of §103(a), over Bauchot, Kalliokulju, and Montpetit.

In the Appeal Brief dated February 9, 2005, Appellants argued that one skilled in the art would not have been led to combine Bauchot with Kalliokulju, for the reasons set forth in the section above, and argued one skilled in the art would not have been led to combine Montpetit with Bauchot and/or Kalliokulju because Montpetit is directed to a data communication system and method that allocates an amount of bandwidth to a ground terminal for uplink transmission of one or more data packets in a low-Earth-orbit satellite data communication network. In contrast, the other applied references, Bauchot and Kalliokulju, do not even mention or contemplate data communications in a satellite data communication network. In response, the Examiner simply alleges that Bauchot and Montpetit both teach an uplink connection. Appellants maintain that simply because the applied references teach an uplink connection would not have led one skilled in the art to combine Bauchot and Kalliokulju with Montpetit, as Montpetit, in particular, is directed to a totally different type of communication network that has unrelated issues and problems that need to be addressed.

Therefore, at least based on the foregoing, Appellants maintain that claims 3 and 8 are patentably distinguishable over the applied references. Further, Appellants maintain that claims 3 and 8 are patentable at least by virtue of their respective dependencies from independent claims 1 and 6. Kalliokulju and Montpetit do not make up for the deficiencies of Bauchot.


CONCLUSION

At least based on the foregoing as well as the arguments submitted in the Appeal Brief, Appellants submit that the present invention, as recited in claims 1-10, is patentably distinguishable over the applied references.

For the above reasons as well as the reasons set forth in Appeal Brief, Appellants respectfully requests that the Board reverse the Examiner's rejections of all claims on Appeal.

An early and favorable decision on the merits of this Appeal is respectfully requested.

Respectfully submitted,



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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: November 8, 2005



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REQUEST TO REOPEN PROSECUTION UNDER 37 C.F.R. § 41.39(b)(1)

MAIL STOP AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Since the Examiner appears to apply a new reference Fichou et al. (US Patent No. 5,909,443) to support his arguments, it appears that the Examiner has implicitly established a new grounds for rejection. In response, Applicants herewith Request to Reopen Prosecution under 37 C.F.R. § 41.39(b)(1). Applicants also submit herewith a Reply Brief just in case the Examiner does not re-open prosecution. Please consider the remarks as submitted herewith on the accompanying pages.

REMARKS

As indicated above, Applicants request reopening of prosecution under 37 C.F.R. § 41.39(b)(1) and submit the following arguments in response to the Examiner's arguments set forth in the Examiner's Answer dated September 8, 2005. If the Examiner wishes to continue to rely upon new reference Fichou to support his claim rejections, Applicants respectfully request that the Examiner issue a new non-final Office Action officially indicating that Fichou is an applied reference.

In the *Response to Arguments* section (7) of the Examiner's Answer, the Examiner responds to Applicants' arguments set forth in the Appeal Brief dated February 9, 2005. In response, Applicants maintain that the present invention, as claimed, is patentable over the applied references at least based on the previously submitted arguments and the arguments set forth below.

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In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

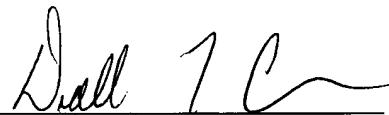
REQUEST TO REOPEN PROSECUTION
U. S. Application No. 09/915,766

ATTORNEY DOCKET NO. Q63182

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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